

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐  
NOV 15 1979PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Amoco Production Company

D. C. C.  
ARTESIA, OFFICE

## 3. ADDRESS OF OPERATOR

P. O. Box 68, Hobbs, NM 88240

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1650' FEL x 1980' FNL Sec. 3, (Unit G, SW/4, NE/4)

At proposed prod. zone

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Approximately 11 Miles Southeast of Artesia, NM

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 16. NO. OF ACRES IN LEASE

## 19. PROPOSED DEPTH

9400'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3560.1 GR

## 22. APPROX. DATE WORK WILL START\*

11-16-79

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4 - 11"	8-5/8"	24#	1800'	Circ to Surface
7-7/8"	5-1/2"	14-15.5#	9400'	Sufficient to tie back into surface pipe.

After drilling, run logs and evaluate. Perforate and stimulate as necessary to attempt commercial production.

Mud Program: O-SCP Water & Native Mud  
SCP-TD Brine & Native Mud

Gas is not committed  
BOP Program attached.  
Archaeological Reconnaissance attached.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

Bob Davis

TITLE Assist. Admin. Analyst

DATE 11-7-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

11-14-79

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

0+4 USGS-A, 1-Div, 1-Susp, 1-Arco, 1-BD

\*See Instructions On Reverse Side

Originally Approved  
11-3-77 by  
Joe G. Lara

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION AT

Form C-102  
Supersedes C-126  
Effective 1-1-65

*AMENDED PLAT*  
All distances must be from the outer boundaries of the Section

Lessee <b>AMOCO Production Company</b>		Lease <b>Fed. "F" Gas Com.</b>		Well No. <b>1</b>
Section <b>G</b>	Township <b>3</b>	Range <b>18 South</b>	County <b>27 East</b>	County <b>Eddy</b>

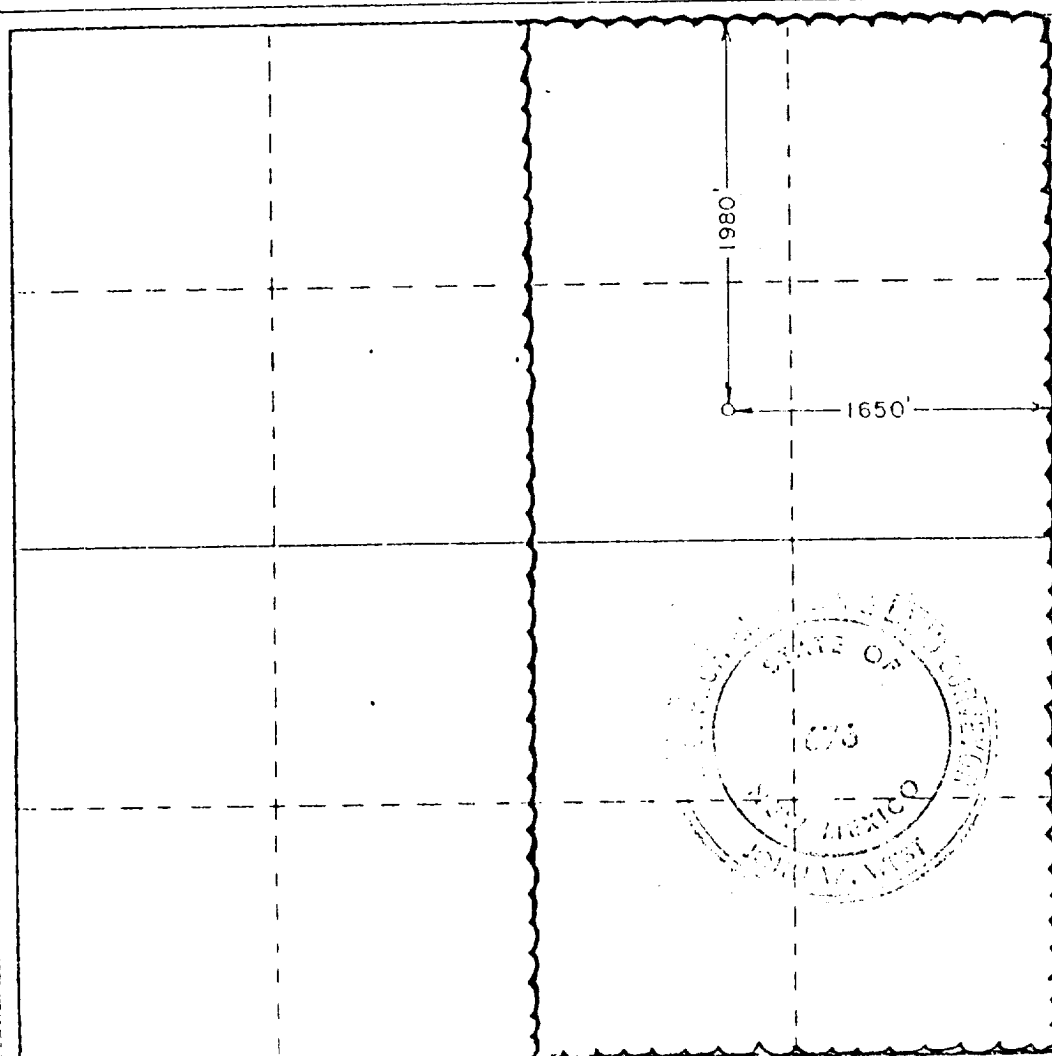
Actual Well Location of Well		Dedicated Acreage	
<b>1980</b>	feet from the North line and	<b>1650</b>	feet from the East line
Surface Elev. <b>3560.1</b>	Producing Formation <b>MORROW</b>	Point <b>Und SCOGGIN DRAW MORROW</b>	<b>320</b>

- 1 Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- 2 If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 3 If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, or otherwise.

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Name Ray W. Cox  
Position Administrative Assistant  
Company AMOCO PRODUCTION COMPANY

Date 11-9-77

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief

Date Surveyed September 15, 1977  
By Charles W. Cox  
Title Surveyor



N.M.O.C.D. COPY

RECEIVED

United States Department of the Interior

NOV 15 1979

GEOLOGICAL SURVEY

P. O. Drawer U  
Artesia, New Mexico 88210

O. C. C.  
ARTESIA, OFFICE

November 14, 1979

Amoco Production Company  
P. O. Box 68  
Hobbs, New Mexico 88240

AMOCO PRODUCTION COMPANY  
Federal "F" Gas Com No. 1  
1980 FNL 1650 FEL Sec. 3 T.18S R.27E  
Eddy County Lease LC 065478-B

Gentlemen:

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 9,400 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
4. All permanent above-ground structures and equipment may be painted Amoco's standard gray color in accordance with the attached request. Otherwise, the color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
5. Before drilling below the 8-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
6. A kelly cock will be installed and maintained in operable condition.



7. After setting the 8-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
  - (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
9. Notify the Survey in sufficient time to witness the cementing of the 8-5/8" and 5-1/2" casing.
10. Cement behind the 8-5/8" casing must be circulated.
11. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

GEORGE H. STEWART

George H. Stewart  
Acting District Engineer

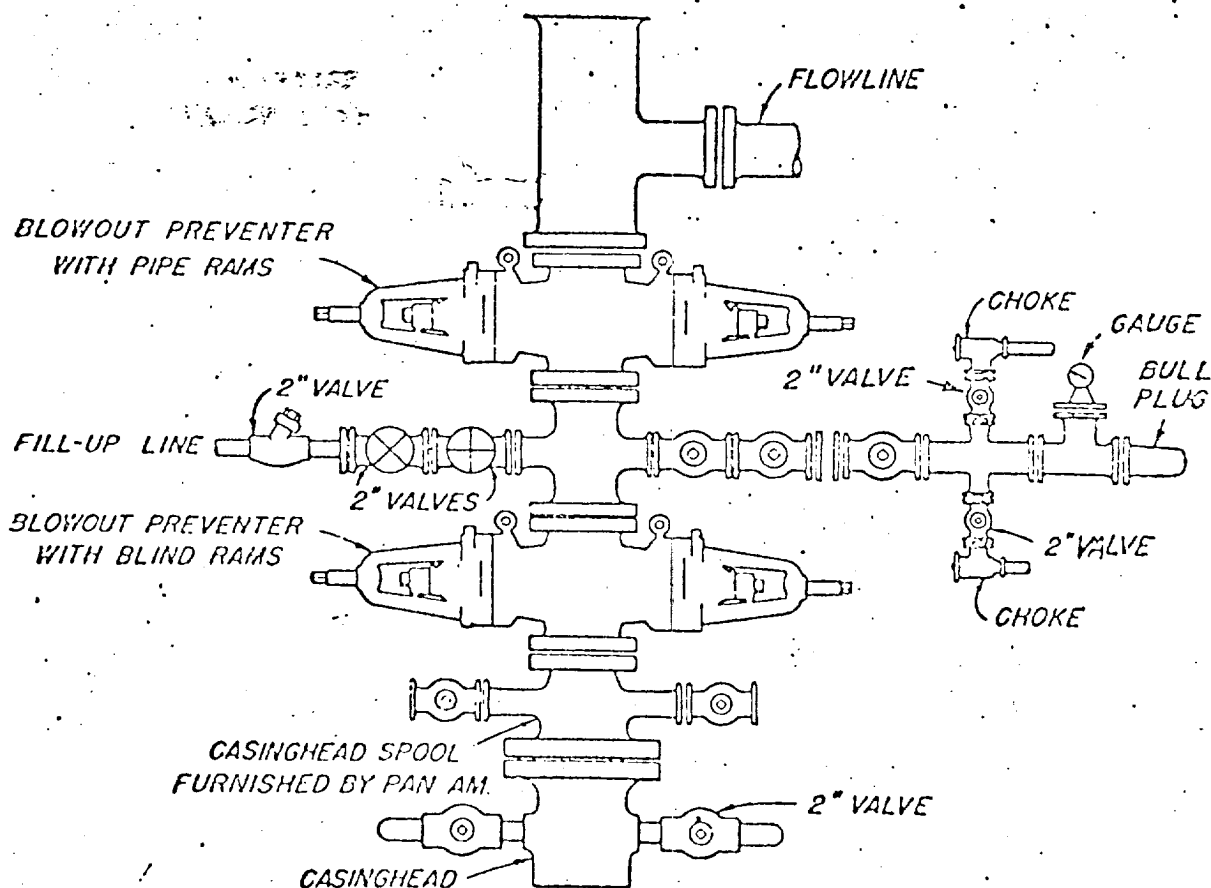
1. Blow-out preventers and master valve to be maintained in good condition, 3,000# W.P. (6,000 p.s.i. test), minimum.
2. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
3. Nipple above blow-out preventer shall be same size as casing being drilled through.
4. Kelly cock required, 3,000# W.P. (6,000 p.s.i. test), minimum.
5. OMSCO or comparable safety valve must be available on rig floor at all times with proper connection or sub, 3,000# W.P. (6,000 p.s.i. test), minimum.
6. Blow-out preventers and master valve while drilling intermediate hole to 6,000' may be 2,000# W.P. (4,000 p.s.i. test), minimum.
7. Choke assembly, beyond second valve from cross, may be positioned (Optional) outside of derrick foundation.
8. Spool or cross may be eliminated if connections are available in the lower part of the blow-out preventer body.
9. Plug valves - gate valves are optional. Valves shown as 2" are minimum size.
10. Casing head and casing head spool, including attached valves, to be furnished by Pan American.
11. Rams in preventers will be installed as follows:

When drilling, use:

Top Preventer - Drill pipe rams  
Bottom Preventer - Blind rams or master valve

When running casing, use:

Top Preventer - Casing rams  
Bottom Preventer - Blind rams or master valve.



BLOWOUT PREVENTER HOOK-UP  
PAN AMERICAN PETROLEUM CORP.

EXHIBIT D-1 MODIFIED

JUNE 1, 1962

Attachment to "Application for Permit to Drill" Form 9-331 C

Amoco Fed "F" Gas Com #1, Unit G, 1650' FEL x 1980' FNL, Section 3, Township 18 South, Range 27 East, Eddy County, New Mexico.

1. Location (See Attached Form C-102)
2. Elevation (See Attached Form C-102)
3. Geologic name of surface formation - Unknown
4. Type of drilling tools and associated equipment to be utilized.  
See Form 9-331 C
5. Proposed drilling depth. (See Form 9-331 C)
6. Estimated tops of important geologic markers.

San Andres	1700'	Atoka	9140'
Abo	5050'	Middle Morrow	9400'
Wolfcamp	6560'		
Cisco	7780'		
Strawn	8660'		

7. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered.

Wolfcamp	6560'
Strawn	8660'
Atoka	9140'
Middle Morrow	9400'

8. Proposed casing program including size, grade, and weight of each string and whether it is new or used.

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>New or Used</u>
1800'	8 5/8"	32#	K-55 ST&C	New
9850'	5 1/2"	15.5-17#	K-55 LT&C	New

9. Proposed setting depth of each casing string and the amount and type of cement (including additives) to be used.

8 5/8" Casing - Sufficient cement to curculate to surface.  
5 1/2" Casing - Sufficient cement to tie back to 8 5/8" casing.

10. Blow Out Preventer Program is attached.

11. Type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained.

Surf. - 1800' Native mud x fresh water  
1800' - 9200' Fresh water and selective flocculant  
9200' - 9850' Brine and circulate reserve pit. At 9300' raise viscosity and reduce water loss to 6.0 cc for Morrow penetration.

12. Testing, logging and coring programs to be followed with provisions made for required flexibility.

Surf. - TD Gamma Ray  
4000' - GR-CNL-FDC-Caliper  
4000' - TD Dual laterolog - Micro SFL  
6500' - TD Mud Logger

13. Any anticipated abnormal pressures or temperatures expected to be encountered or potential hazards such as hydrogen sulfide gas, along with plans for mitigating such hazards.

None anticipated.

14. Anticipated starting date and duration of operation.

11-16-79 1-1-80

15. Other facets of the proposed operation, operator wishes to point out for the Geological Survey's consideration of the application.

Request exemptions from the painting stipulations of Sec. 102 (a) (8) of the "Federal Land Policy and Management Act of 1976" to paint any tanks, separators, and treaters required for the production of this well, Amoco's standard gray color. If a pumping unit is required for the continued production of this well, it will be painted black with orange safety color coding which conforms with your current painting guidelines.

ATTACHMENT TO FORM 9-331C

APPLICATION FOR PERMIT TO DRILL

LEASE Amoco Fed "F" Gas Com WELL NO. 1


LOCATION Unit G, Sec. 3, T-18-S, R-27-E

POOL Scoggin Draw Morrow

COUNTY Eddy, New Mexico

The undersigned hereby states that Amoco's representative, Mr. Calvin Holloway, personally contacted Bogle Farms, the ~~owner~~/lessee of the surface land where the proposed work is to be conducted and advised him of the proposed work, the construction site and pertinent roads included in the project. It is further stated that, upon being fully advised of the extent of the work and the effect upon the surface, said owner has consented to the said work and that agreement as to the compensation for damages to the surface estate has been reached.

If the well is a producer, all pits will be cut, filled and levelled as soon as practical after the pits are dry. If the well is a dry hole, pits will be filled as above, a dry hole marker will be installed and the location and pad will remain intact.

  
\_\_\_\_\_  
Ray W. Cox  
Administrative Assistant

10-13-77  
Date



## Proposed Development Plan for Surface Use

Amoco Production Company's Amoco Fed "F" Gas Com #1 Unit G, Sec. 3,  
T-18-S, R-27-E, Eddy County-(Development Well).

### 1. Existing roads including location of exit from main highway.

Detailed map showing drillsite location in relation to the nearest town and all existing roads within one mile of the wellsite are shown on Exhibit A. From Artesia 60 East on Hwy 82 12 miles. Electric substation is on N side of road at turnoff, Turn S on blacktop road 1000' to fork in road. Take right hand fork to Empire Abo Gas Plant. From EAGP, go West to location. See Exhibit B.

### 2. Planned access roads. (Width, maximum grade, turnout, drainage design, location and size of culverts and surfacing material, where fences will be cut, and where gates or cattle guard will be used.) (See Exhibit B)

From EAGP, new access road will be built northwest to location. Access road will be approximately 600' long and 12' wide of 6" compacted caliche. See Exhibit B.

### 3. Location of existing wells.

All existing wells within one mile radius are shown on Exhibit C.

### 4. Location of tank batteries and flow lines.

Gas product taken at location. If well is a commercially productive gas well, a high pressure separator will be installed on S side of pad & gas connection will be made at separator vent. If well produces condensate or oil, tank battery will be constructed at the South end of drilling pad.

### 5. Location and type of water supply.

Water to be hauled. Fresh water will be trucked from Empire Abo Gasoline Plant. Brine water will be trucked from the Champion Brine Station.

### 6. Source of construction materials.

Caliche will be obtained from an existing pit located just northeast of Amoco Fed "G" No. 1. See Exhibit B.

### 7. Waste Disposal.

- a. Drill cuttings will be disposed of in the reserve pit.
- b. Drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry.

- c. Trash, waste paper, garbage and junk will be burned or buried with a minimum of 24" cover. Wastematerial will be contained to prevent scattering by wind prior to ultimate disposal.
- d. Any produced water will be contained in tanks and be disposed of in an approved manner. Oil produced will be stored in tanks until sold, at which time it will be hauled from location.
- e. Current laws and regulations pertaining to disposal of human waste will be complied with.
- f. If productive, maintenance waste will be placed in special containers and buried or hauled away periodically.

#### 8. Ancillary Facilities.

No camps, airstrips, etc., will be constructed.

#### 9. Wellsite Layout.

- a. Size of Drilling pad - 290'x190'x6"
- b. Compacted - Caliche
- c. Surfaced - No
- d. 450' square area around wellsite has been cleared by archeologist.
- e. See Exhibit D.

#### 10. Restoration of Surface.

Producing Well - all pits will be cut, filled, and levelled as soon as practical to original condition with rehabilitation to commence following removal of drilling and completion equipment. Rehabilitation to be completed in 180 days if possible.

Dry Hole - same as above with dry hole marker to be installed and surface reseeded if required.

#### 11. Other Information.

- a. Terrain - relatively flat.
- b. Soil - rocky.
- c. Vegetation - sparse - catclaw and greasewood and mesquite.
- d. Surface Use - grazing
- e. Ponds and Streams - None
- f. Water Wells - Well at Empire Abo Gasoline Plant.
- g. Residences and Buildings - None.
- h. Arroyos, Canyons, etc. - None
- i. Well Sign - posted at drillsite.
- j. Open Pits - all pits containing liquid or mud will be fenced.
- k. Archaeological Resources - Drillsite, which is in relatively flat semi-arid, desert country, is in a low environmental risk area. The total effect of drilling and producing in this area would be minimal. No known archaeological, historical, or cultural sites exist in the drill or road areas.

12. Operator's Representative.

Field personnel responsible for compliance with development plan for surface use is:

J. H. Hankins, Drilling Superintendent  
P. O. Drawer A  
Levelland, Texas 79336  
Office Phone: 806-894-3163

LEASE & WELL NUMBER AMOCO FED "F" GAS COM #1

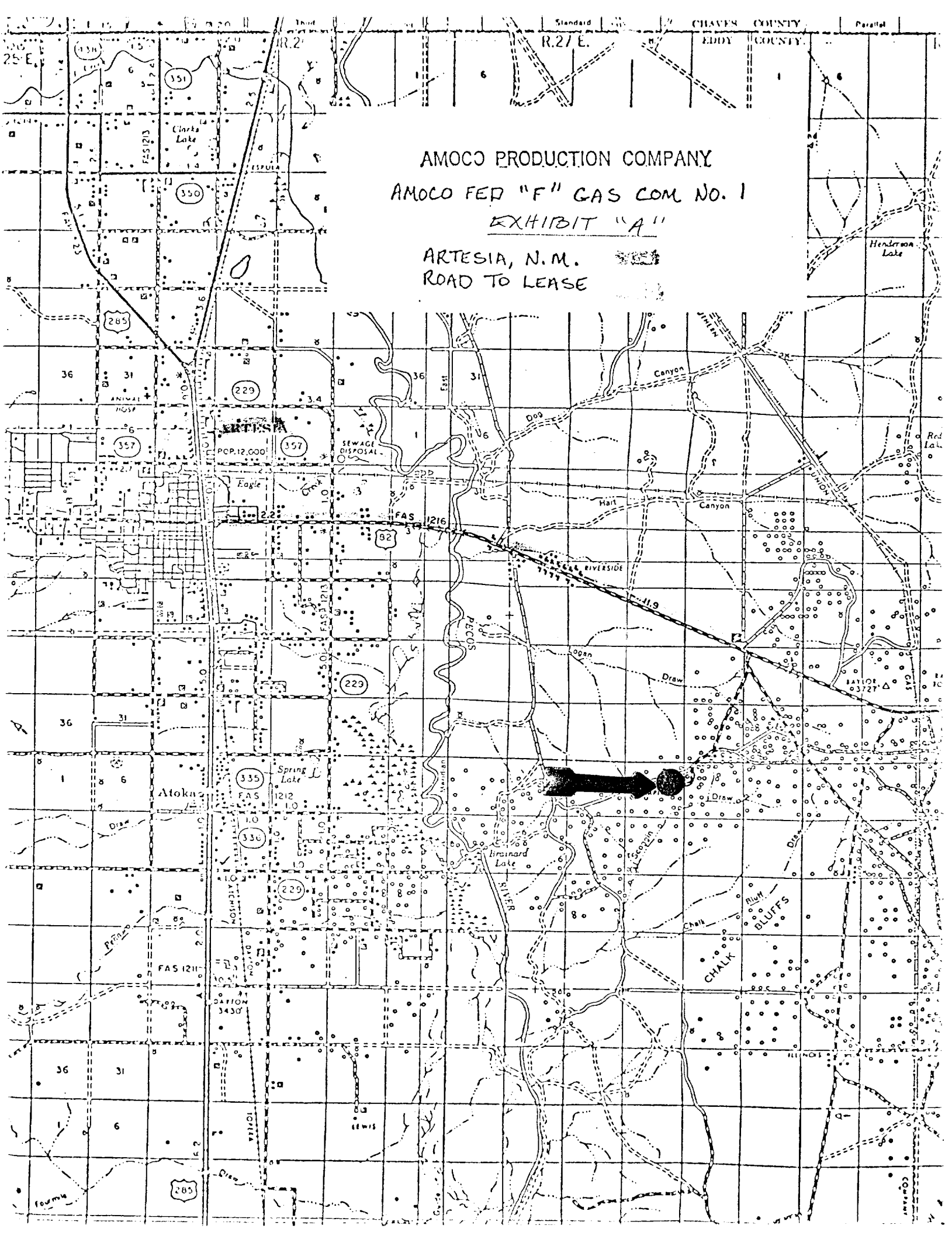
LOCATION \_\_\_\_\_

13. Certification: The following statement is to be incorporated in the plan and must be signed by the lessee's or operator's field representative who is identified in Item No. 12 of the plan.

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by AMOCO PRODUCTION COMPANY and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

10-13-77  
DATE

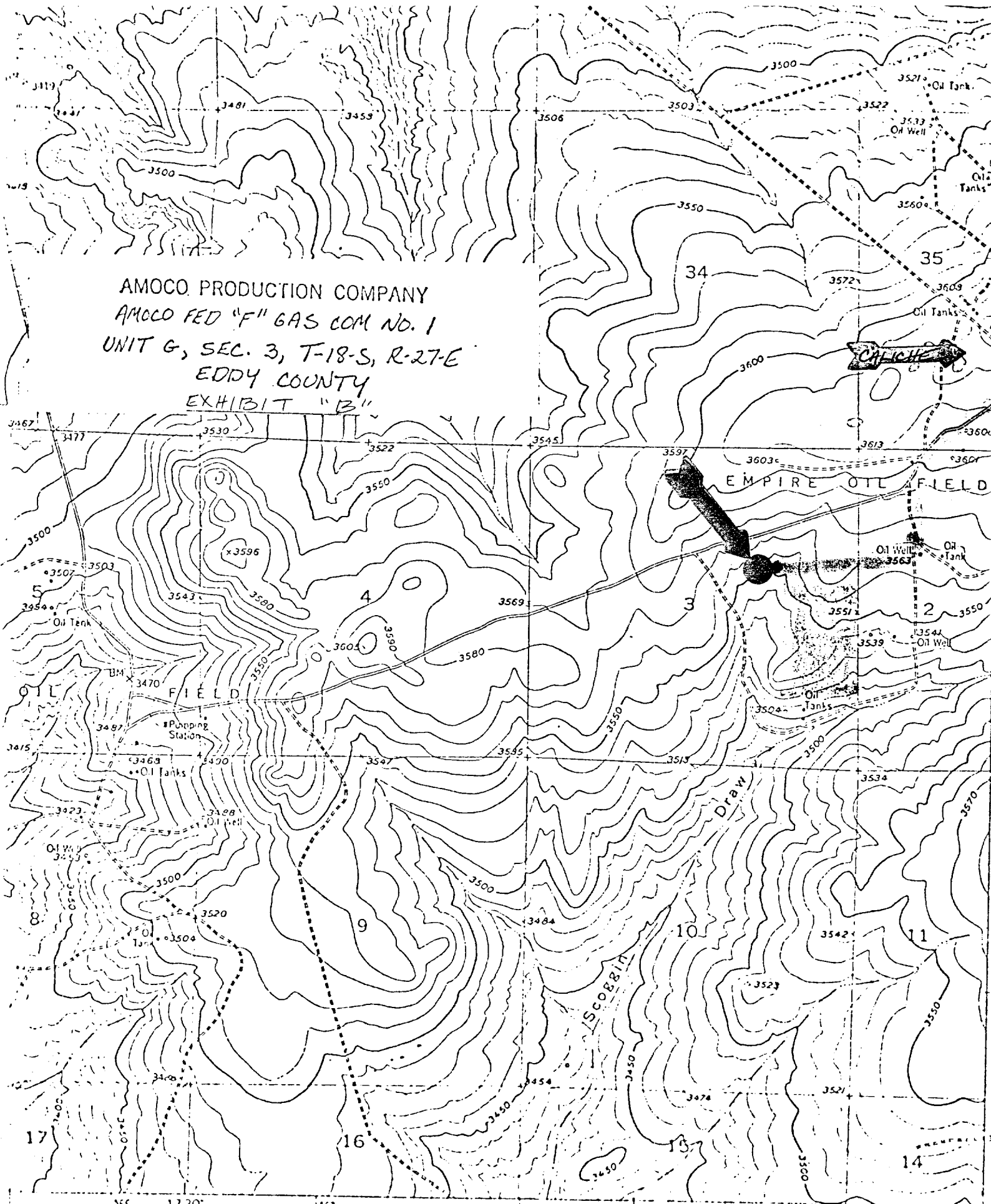
J. H. Hawkins Jr. Drilling Foreman  
NAME AND TITLE



AMOCO PRODUCTION COMPANY  
AMOCO FED "F" GAS COM NO. 1  
EXHIBIT "A"

ARTESIA, N.M.  
ROAD TO LEASE

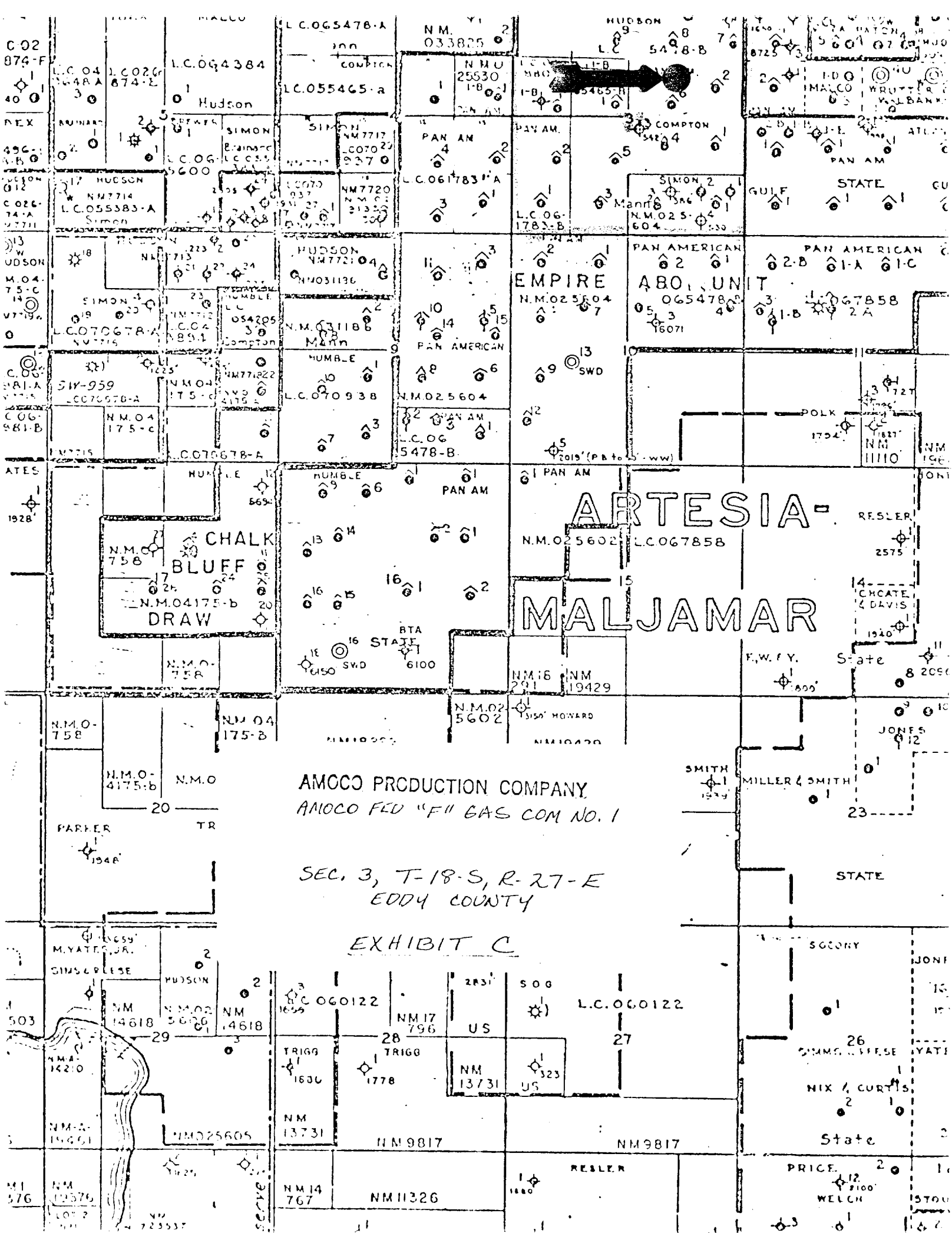
AMOCO PRODUCTION COMPANY  
 AMOCO FED "F" GAS COM NO. 1  
 UNIT G, SEC. 3, T-18-S, R-27-E  
 EDDY COUNTY  
 EXHIBIT "B"



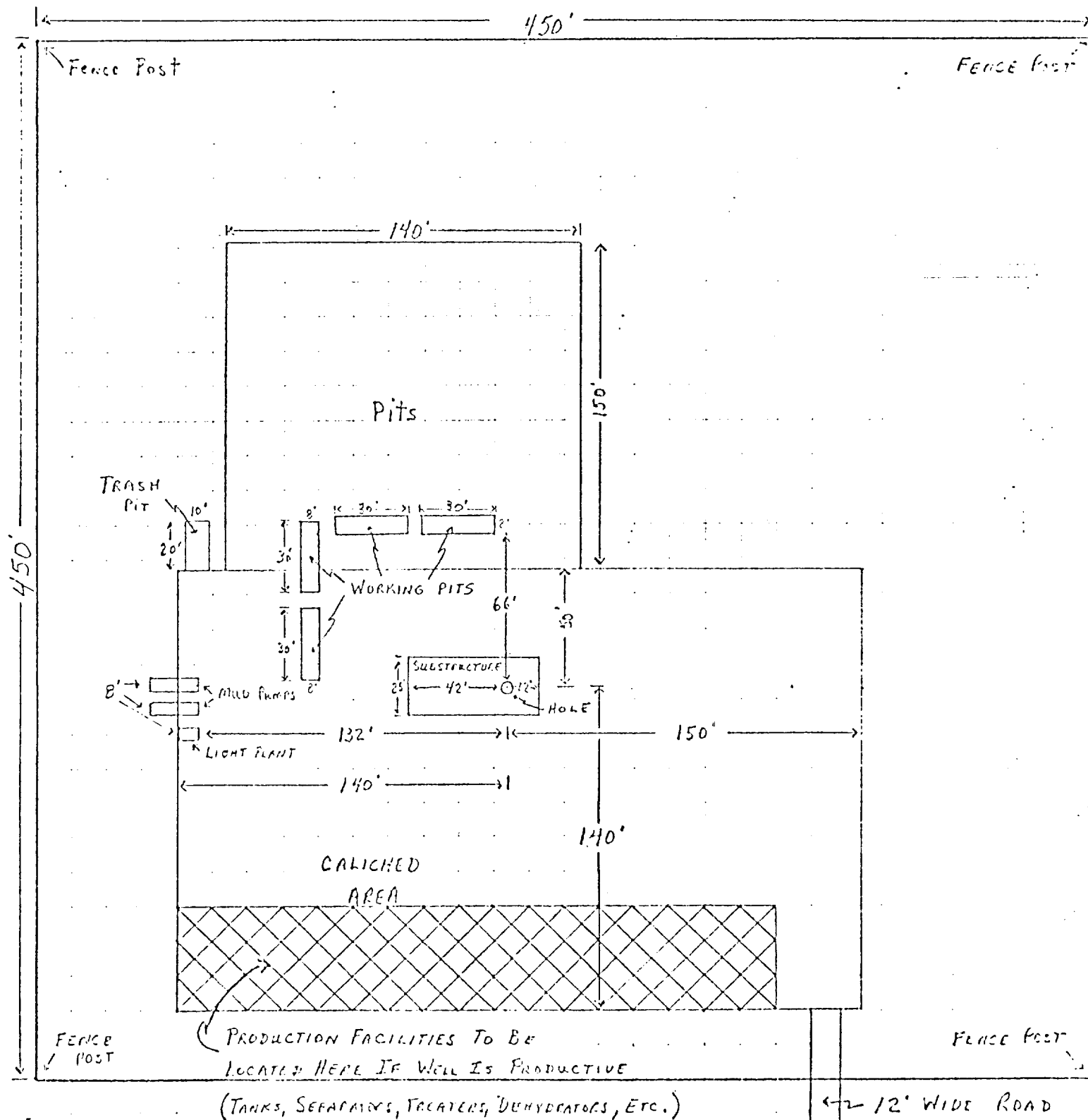
ROAD TO WELLSITE  
 EMPIRE ABO GASOLINE PLANT

ROAD CLASSIFICATION

1041



BY RC  
SCALE - 1" = 60'





Archaeological Clearance Report  
for  
Amoco Production Company

by

Eduardo A. Mimiaga

Submitted by

Dr. J. Loring Haskell  
Operations Director and  
Principal Investigator  
Agency of Conservation Archaeology  
Eastern New Mexico University  
Portales

3 October 1977

## INTRODUCTION

An archaeological reconnaissance was recently completed by the Agency of Conservation Archaeology, Eastern New Mexico University, Portales, for Amoco Production Company in Eddy County, New Mexico. The area will be impacted by the construction of a drill location and access road. This project was completed under Federal Antiquities Permit No. 77-NM-021.

The project was administered by Mr. Ray Cox, representative for Amoco Production Company, and Dr. J. Loring Haskell, Operations Director and Principal Investigator, Agency of Conservation Archaeology, Eastern New Mexico University, Portales.

The reconnaissance was completed by Eduardo A. Mimiaga on 1 October 1977.

## SURVEY TECHNIQUE

The archaeologist accomplished the reconnaissance by walking the length and breadth of the proposed access road right-of-way in a zigzag pattern. The drill pad location was walked in a series of 20 ft parallel corridors. These techniques permitted optimal conditions for the examination of areas of primary and secondary impact.

### Amoco Fed. "G" Gas Company No. 1

## Location

The proposed access road right-of-way is 12 ft wide and extends 600 ft in length, and the drill pad location is 450 x 450 ft. These pass through:

NE $\frac{1}{4}$ SE $\frac{1}{4}$ , Section 34, T17S, R27E, NMPM, Eddy County, New Mexico (BLM)

Map Reference: USGS Spring Lake Quadrangle, 7.5 Minute Series.

## Terrain

Local terrain consists of an undulating plain with sandy soils containing caliche inclusions.

### Recommendations

ACA recommends clearance for the proposed drill location and suggests that construction proceed without modification of existing plans.

### Amoco Fed. "F" Gas Com. No. 1

### Location

The proposed drill location is 450 x 450 ft and is situated next to an existing access road located in the:

SW $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 3, T18S, R22E, NMPM, Eddy County, New Mexico (BLM)

Map Reference: USGS Spring Lake Quadrangle, 7.5 Minute Series.

### Terrain

The local terrain consists of an undulating plain with sandy soils containing caliche inclusions.

### Floristics

The local plant community consists of Larrea tridentata, Gutierrezia sarothrae, Scleropogon brevifolius and Tridens pulchellus.

### Cultural Resources

No cultural resources were recorded during this reconnaissance.

### Recommendations

ACA recommends clearance for the proposed drill location and suggests that construction proceed without modification of existing plans.

Meyers "B" Fed. No. 26Locations

The proposed drill location is 300 x 300 ft and the access road measures 12 ft in width and extends 108 ft through:

NE $\frac{1}{4}$ SE $\frac{1}{4}$ , Section 9, T24S, R37E, NMPM, Lea County, New Mexico (BLM).

Map Reference: USGS Jal NW Quadrangle, 7.5 Minute Series

Terrain

Local terrain consists of a level plain with thin sandy soils containing caliche inclusions.

Floristics

The local plant community consists of Prosopis juliflora, Gutierrezia sarothrae, and Bouteloua gracilis.

Cultural Resources

No cultural resources were recorded during this reconnaissance.

Recommendations

No cultural resources were recorded during this reconnaissance.